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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,711	11/24/2003	Gary E. Fout	05542.019002	5375

7590 04/06/2004

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EXAMINER

O MALLEY, KATHRYN S

ART UNIT	PAPER NUMBER
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3749

DATE MAILED: 04/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/720,711

Applicant(s)

FOUT ET AL.

Examiner

Kathryn S. O'Malley

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 11-13, 15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hill et al. in view of Barcell.
3. Hill et al. teaches a method of separating hydrocarbons from a material comprising the steps of passing a stream of heated air over the material to volatilize the hydrocarbons; passing the stream through first filter 12, condenser 24, and second filter 28; and collecting the liquefied hydrocarbons. Note column 3, lines 6-37; column 4, lines 15-39; and Figures 1 and 2. Hill et al. does not teach thermally oxidizing non-condensable escaping gases or recirculating the escaping air. Barcell teaches a similar method for separating hydrocarbons comprising the steps of thermally oxidizing non-condensable escaping gases and recirculating the escaping heated air. Note column 4, line 49- column 5, line 26. As Barcell teaches that recirculating the heated air will lead to a more energy efficient separating method and that thermally oxidizing the gases will rid the system of harmful gases, it would have been obvious to one of ordinary skill in the art to modify the separating method of Hill et al. with the recirculating and thermal oxidizing of Barcell. Regarding claim 16, while Hill et al., as modified by Barcell, does not define the resulting reduction level of hydrocarbons, such a limitation would have

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been obvious to one of ordinary skill in the art since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

4. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hill et al. and Barcell as applied to claim 1 above, and further in view of Bork.

5. Hill et al, as modified by Barcell, does not teach directing the air stream through a second condenser. Bork teaches directing an air stream through a series of condensers and blowers. Note condensers 30, 36, and 40 and blowers 50, 60, and 70 in column 2, line 16- column 3, line 17 and Figures 1 and 2. As Bork teaches the improved level of condensation achieved by directing an air stream through a series of condensers, it would have been obvious to one of ordinary skill in the art to modify the separating method of Hill et al., as modified by Barcell, with Bork's series of condensers.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Trim, Abdelmalek, Manchak, Jr., and Sardari et al. teach similar separating methods and apparatus.

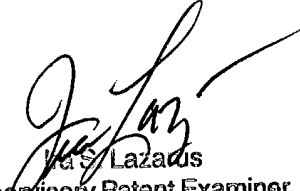
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kathryn S. O'Malley whose telephone number is (703)308-2844. The examiner can normally be reached on M-F (8:30-5:00).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira Lazarus can be reached on (703)308-1935. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KSO


Ira S. Lazarus
Supervisory Patent Examiner
Group 3700